UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,706	10/21/2003	Thomas Kraenzler	510.1086	9728

23280 7590 06/25/2004

DAVIDSON, DAVIDSON & KAPPEL, LLC
485 SEVENTH AVENUE, 14TH FLOOR
NEW YORK, NY 10018

EXAMINER	
GUTMAN, HILARY L	

ART UNIT	PAPER NUMBER
3612	

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/690,706	KRAENZLER ET AL.
	Examiner	Art Unit
	Hilary Gutman	3612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 May 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) *9-14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/21/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I (claims 1-8) in a paper filed 5/17/04 is acknowledged.

2. Claims 9-14 are hereby withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in a paper filed 5/17/04.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Oath/Declaration

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

> The oath or declaration is defective because: the declaration is not executed (i.e., signed) by any of the inventors.

Specification

5. The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179

USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

6. The disclosure is objected to because of the following informalities: at [0007], line 1, "the" (second occurrence) should be deleted. Furthermore, [0014] is unclear as to what is meant by the "bright transmission" and the "dark transmission" and further as to how the percentages are derived or of what value the percentages are taken. Appropriate correction is required.

7. The use of the trademark plexiglas has been noted in this application. The entire word should apparently be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Objections

8. Claims 4-5 are objected to because of the following informalities: on line 1, "darkened" should be "darkening" to correspond with claim 1. Additionally, in claim 4, "SPD" is an acronym and should perhaps be replaced by the actual words the acronym represents (such as suspended particle device). Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 3-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claims 3-4, the "dark transmission" is unclear and further the dark transmission being less than or equal to 5 percent is also unclear as to what this percentage represents and how this value is being determined or measured.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 1 and 3-5, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over De Lena in view of Poll et al.

De Lena (5,466,037) discloses a vehicle window (or sunroof) for a vehicle, comprising: a pane of glass; and a function layer made of a low-emission material disposed on an inside

surface of the pane, the function layer reflecting a first infrared radiation into the vehicle and reducing an emission of a second infrared radiation from the glass pane into an interior of the vehicle.

De Lena lacks the pane of glass being a darkening or laminated glass.

Poll et al. (6,407,847) teach an electrochromic window assembly having an electrochromic device 22 having a low-emission (low-E) layer or coating 46 thereon.

With regard to claim 3, the glass includes a darkened glass made of electrochrome glass.

With regard to claim 4, the glass 140 in another embodiment contains an SPD film.

With regard to claim 5, the glass includes primarily silicate glass (or borosilicate).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created the pane of glass of De Lena to be an electrochromic or darkening glass in order to provided a darkened vehicle window in sunlight and be most useful to reject heat during the summer months.

14. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Lena, as modified, and applied to claim 1 above and further in view of Hermann et al.

De Lena, as modified, lacks the low-emission material having an emission factor for infrared radiation of less than 0.5.

Hermann et al. teach a low-emission material or absorber comprising a flat metallic plate whose surface is blackened and has a low emission factor of less than or equal to 0.3 for heat radiation (Column 2, lines 33-36).

It should be noted with regard to claim 2, that although Hermann et al. does not discreetly disclose the range of thickness for the function layer being less than 0.5 as claimed, the ranges and thicknesses disclosed by Hermann et al. do fall within the claimed range and therefore satisfy the claim requirements.

In addition, if a claimed range and a prior art range do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, then there would be a prima facie case of obviousness and the set value in the claimed range is not deemed critical or inventive (MPEP 2114.05). Furthermore, there is no evidence of criticality of the claimed range.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the emission factor of the low-emission material of De Lena, as modified, to be less than 0.5 as taught by Hermann et al. in order to provide the optimum conditions to prevent heat radiation into and out of the vehicle.

15. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Lena, as modified, and applied to claim 1 above and further in view of Hermann et al.

De Lena, as modified, lacks the material being electrically conductive SnO such as indium oxide; and lacks the specific thickness of the function layer.

Hermann et al. teach an infrared reflecting layer 2 made of tin oxide or more preferably indium oxide (Column 2, lines 1-3). The infrared reflecting layer 2 has a thickness of 0.3 microns (or 300 nm).

It should be noted with regard to claim 8, that although Hermann et al. does not discreetly disclose the range of thickness for the function layer being 50-500nm as claimed, the ranges and thicknesses disclosed by Hermann et al. do fall within the claimed range and therefore satisfy the claim requirements.

In addition, if a claimed range and a prior art range do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, then there would be a prima facie case of obviousness and the set value in the claimed range is not deemed critical or inventive (MPEP 2114.05). Furthermore, there is no evidence of criticality of the claimed range.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided an infrared reflecting layer as taught by Hermann et al. in place of the low-emission material of De Lena, as modified, in order to provide the optimum conditions to prevent heat radiation into and out of the vehicle.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hilary Gutman whose telephone number is 703-305-0496.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on 703-308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

18. **Any response to this action should be mailed to:**

Assistant Commissioner for Patents

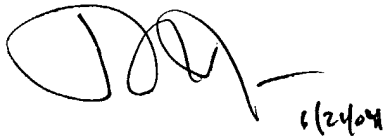
Washington, D.C. 20231

or faxed to:

(703) 872-9326, (for formal communications intended for entry)

or:

(703) 746-3515, (for informal or draft communications, please clearly label "PROPOSED" or "DRAFT").



1/24/04

D. GLENN DAYOAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600